GEORGE PAPANICOLAOU (1883-1962)





George Papanikolaou was a Greek pioneer in cytopathology, early cancer detection and inventor of the "Pap test".

Early Life

Born in 1883 in Kyme, Greece, Dr. George Papanicolaou attended school there and at the age of 21 obtained the Doctor of Medicine degree from the University of Athens.





In an effort to further his studies, he went to Germany to study the philosophy of biologic sciences.

After a brief period of studying with August Weisman, Papanicolaou went to Munich.





After his studies in Munich, he returned to Greece where he met *Andromachque Mavroyeni*, later known as Mary Papanicolaou or Mrs Pap. She became his lifelong companion and a great source of support for him.

Medical Career

In 1913 he emigrated to the U.S. in order to work in the New York Hospital and the Department of Anatomy at the world renowned Cornell University. His wife, Mary, also worked there as his

technician. Dr. Papanicolaou worked at Cornell from 1913 until a few months before his death.





Later years



In 1961 he moved to Miami, Florida, to develop the *Papanicolaou Cancer Research Institute* at the University of Miami, but died prior to its opening.

Dr. Papanicolaou died on February 18, 1962 of heart failure and pulmonary edema and is buried in New Jersey.

Discoveries



Dr Papanicolaou first reported that uterine cancer could be diagnosed by means of a vaginal smear in 1928.

That year Papanikolaou told an incredulous audience of physicians about the non-invasive technique of the preparation of vaginal and cervical smears to detect physiologic and cytologic changes during the menstrual cycle as <u>a way to identify cervical cancer.</u>

However, the importance of his work was not recognized until the publication, of 'Diagnosis of Uterine Cancer by the Vaginal Smear' in 1943.

The Pap test

He thus became known for his invention of the Papanicolaou test, commonly known as the *Pap smear* or *Pap test*, which is used worldwide for <u>the detection and prevention of cervical cancer</u> and other cytological diseases of the female reproductive system.



(normal Pap test)



(abnormal Pap test)

According to statistics, the <u>incidence of death due to</u> <u>cancer of the uterus decreased by 70%</u> after the implementation of the Pap smear.

Awards and nominations



THE UNITED NATIONS,

in application of resolution 1398 (XIV) of the General Assembly on the international encouragement of scientific research into the control of cancerous diseases,

> on the recommendation of the WORLD HEALTH ORGANIZATION,

> > awards a United Nations Prize to

the late Doctor George N. Papanicolaow

former Director of the Papanicolaou Cancer Research Institute, Miami, Florida, United States of America

> for the development of a cytological technique for the early diagnosis of certain forms of cancer.

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This prize was awarded at a plenary meeting of the seventeenth session of the United Nations General Assembly on the 10th day of October 1962 Papanicolaou was the recipient of the Albert Lasker Award for Clinical Medical Research in 1950.

He was proposed for the Nobel Prize twice. The Committee refused the proposal, since it could not award a method for treating, but only its discovery.

What can they now say about the man who "gave life to women of the whole world? "

Posthumous honours

Papanikolaou's portrait appeared on the obverse of the Greek 10,000-drachma banknote of 1995, prior to its replacement by the Euro.

In 1975 and 1978 respectively, the Greek and U.S. Postal Services honored George Papanicolaou with commemorative stamps for early cancer detection.







Contribution



Millions of women have received the Pap test and *deaths from cancer* of the uterus *have been greatly reduced* because of his test. It was predominantly through Dr. Papanicolaou's efforts that cytology became accepted as a basis for diagnosis.





"Millions of women around the world have been saved from the Pap Test"



"Us women of the world thank our great benefactor"